

**Fast Ethernet
Converter**

User's Guide

V 1.0

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FCC Warning

The HTB-1100/1100S have been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These standards are designed to provide reasonable protection against harmful interference when these devices are operated in a commercial environment. These devices can use, generate and radiate radio frequency energy and may cause harmful interference to radio communications unless installed in accordance with this User's Guide. Operation of this device in a residential area is likely to cause harmful interference which will make the user responsible for the appropriate remedial action at his/her own expense.

CE Mark Warning

These are Class A products. In a domestic environment these products may cause radio interference in which case the user will need to consider adequate preventative measures.

1. Checklist

Your HTB-1100/1100S carton should contain the following items:

- HTB-1100/1100S Converter
- AC-DC Power Adapter
- This User's Guide

Please notify your sales representative immediately if any items are missing or damaged.

2. Overview

The 10/100Base-TX to 100Base-FX Fast Ethernet Converter is fully compliant with all IEEE802.3u standards.

- * HTB-1100: SC\ST Fiber Connector (Multi-mode)
- * HTB-1100S: SC Fiber Connector (Single-mode)

Six LEDs display instant status monitoring for Power, Fdx/Col, FX(Link/Act), Tx(Link/Act), Fx 100, Tx100.

3. Installation

Please follow the procedure outlined below:

- > Turn off the power of the device/station in the network in which the HTB-1100/1100S will be installed.
- > Ensure that there is no activity in the network.
- > Attach fiber cable from the HTB-1100/1100S to the fiber network. The fiber connections must be matched--Transmit socket to receive socket.
- > Attach a UTP cable from the 100Base-TX network to the RJ-45 Port on the HTB-1100/1100S.
- > Connect the power cord to the HTB-1100/1100S and check that the Power LED lights up. The TP Link and FX Link LEDs will light when all the cable
- > Connections are satisfactory
Turn on the power of the device/station.

Front and Side Panel Basic Network Connection

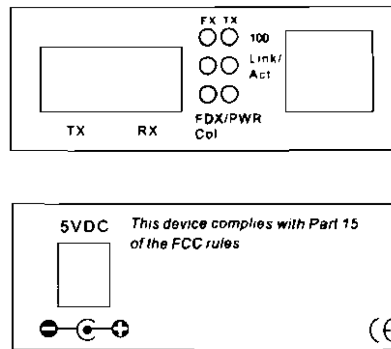


Fig.1 HTB-1100/1100S Converter Front & Side

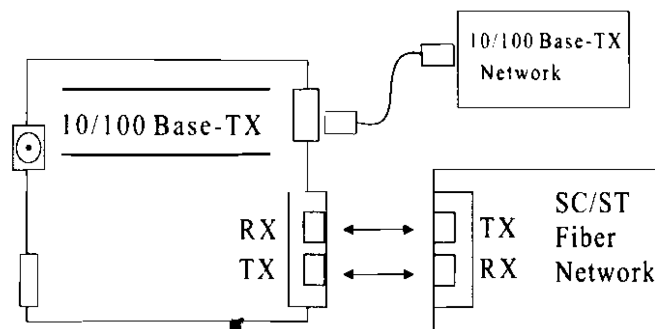


Fig.2 Basic Network Connection

Note:

- a. Wiring Pin - outs for connection of the TX port:
 - ⇒ To a Hub or REpeater(MPR): 1 to 3,2 to 6,3 to 1, 6 to 2 (Crossover Cable)
 - ⇒ To a workstation (DTE): 1, 2, 3, 6 to 1, 2, 3, 6 (Straight-through Cable)
- b. The full or half duplex mode must be selected for both the converter AND the linked unit.

4. LED Description

LED	Colour	Function
FX 100	Green	Lit when 100 Base-FX operation.
FX Link/ACT	Green	Lit when fiber cable connection with remote device is good. Blinks when any FX traffic is present.
Power	Green	Lit when + 5V Power is available.
FDX/Col	Green	Lit when Full Duplex Mode is enabled. Blinking when collision is present.
TX 100	Green	Lit when 100Base-TX operation.
TX Link/ACT	Green	Lit when TP cable connection with remote device is good. Blinks when any TX traffic is present.

5. Technical Specifications

The Converter conforms to the following standards:

Standards: IEEE802.3u Fast Ethernet
 10/100Base-TX and 100Base-FX
 Connectors(RJ45-UTP and Fiber SC or ST)
 >HTB-1100 : RJ-45 and SC/ST Connector
 (Multi-mode)
 >HTB-1100S : RJ-45 and SC Connector
 (Single-mode)

LED: POWER, FDX/Col, FX Link/Act,
 TX Link/Act, Fx100, TX100.

Data Transfer Mode : 10/100Mbps
 Duplex Mode : Full or Half Duplex Mode

Power Requirement : AC 100-260V
 DC 1A@+5V

Ambient Temperature: 0°C to 70°C

Humidity : 5% to 90%

Dimensions : 26×71×97mm(H×W×D)

Cable:

UTP: Cat.5 UTP cable

Fiber: Multimode: 50/125, 62.5/125, or
 100/140um

Singlemode: 8.3/125, 8.7/125, 9/125,
 or 10/125um

6. Fiber Optic Information

Fiber Optic Detail:

	HTB-1100	HTB-1100S-25
Connector Type	SC / ST	SC / ST
Fiber Type	Multi-mode	Single-mode
Wavelength	850/1310nm	1310nm
Typical Distance	2Km	25Km
Min TX PWR	-19.0dBm	-15.0dBm
Max TX PWR	-14.0dBm	-7.0dBm
Sensitivity	-31.0dBm	-32.0dBm
Link Budget	12.0dBm	17.0dBm

	HTB-1100S-40	HTB-1100-60
Connector Type	SC / ST	SC / ST
Fiber Type	Single-mode	Single-mode
Wavelength	1310nm	1310nm
Typical Distance	40Km	60Km
Min TX PWR	-10.0dBm	-5.0dBm
Max TX PWR	-3dBm	0dBm
Sensitivity	-33.0dBm	-35.0dBm
Link Budget	23.0dBm	30.0dBm